

WHAT IS CLAIMED IS:

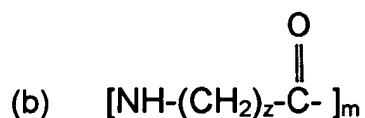
1. An acid-dye and coffee stain resistant carpet comprising:

a backing material; and

stain resistant sheath/core bicomponent face fibers affixed in said backing material and bound thereto, said face fibers having a core of a first polyamide component; and a sheath substantially or completely covering said core and of a second polyamide component which is inherently chemically compatible with said first polyamide component, said second polyamide component comprising at least one stain resistant polyamide polymer selected from the group consisting of:



where x and y may be the same or different integers from about 4 to about 30, the sum of x and y is greater than 13, and n is greater than about 40; and



where z is an integer from about 9 to about 30 and m is greater than about 40;

(c) derivatives of (a) or (b) including polymers substituted with one or more sulfonate, halogenate, aliphatic or aromatic functionality; and

(d) copolymers and blends of (a), (b) and (c).

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said carpet in an uncolored state having a red drink staining depth of less than 15 CIE ΔE units and a coffee staining depth of less than about 10 CIE ΔE units.

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2. The carpet of claim 1, wherein said second polyamide component has a concentration of titratable amino end-groups less than 30 milliequivalents per kilogram.

3. The carpet of claim 2, wherein said concentration of titratable amino end-groups in said second polyamide polymer is less than 5 milliequivalents per kilogram.

4. The carpet of claim 1, wherein said second polyamide polymer is substantially sulfonate-free.


5. The carpet of claim 1, wherein said second polyamide polymer is nylon 6/12 or nylon 12.

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6. The carpet of claim 1, wherein said non-polar functional groups comprise greater than 80% by weight of said non-carbonyl polymer carbons.

7. The carpet of claim 1, wherein said first polyamide component is selected from the group consisting of:

nylon 6;
nylon 12;
nylon 11;
nylon 6/6;
nylon 6/12;
nylon 6/10; and
combinations thereof.

8. The carpet of claim 1, wherein said first polyamide component is nylon 6/6 or nylon 6.

 9. The carpet of claim 3, wherein said first polyamide component has an amine-end-group concentration from greater than about 5 to less than about 100 milliequivalents per kilogram.

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0742 10. The carpet of claim 9, wherein said first polyamide component has an amine-end-group concentration of from about 20 to about 50 milliequivalents per kilogram.

11. The carpet of claim 1, wherein said fiber comprises from about 10% by weight to about 97% by weight of said core phase and from about 90% by weight to about 3% by weight of said sheath phase.

12. The carpet of claim 11, wherein said fiber comprises from about 85% by weight to about 90% by weight of said core phase and from about 15% by weight to about 10% by weight of said sheath phase.

13. The carpet of claim 1, wherein said fiber has a non-round cross section.

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14. The carpet of claim 13, wherein said fiber has a multilobal cross section.

15. The carpet of claim 14, wherein said fiber has a trilobal cross section.

16. The carpet of claim 1 wherein said fiber has a percent steam heatsetting shrinkage value which is about 70% or less of a percent steam heatsetting shrinkage value of an otherwise identical fiber consisting of only said first polyamide component.

 17. The carpet of claim 1 wherein said red drink staining depth is less than about 10 ΔE units.

18. The carpet of claim 1 wherein x, y and z are each no more than 20.

19. The carpet of claim 18 wherein x, y and z are each no more than 15.

